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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/356,940	07/19/1999	JOSEPH GRAJEWSKI	438P470	8491

7590 11/22/2002
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EXAMINER

WERNER, BRIAN P

ART UNIT	PAPER NUMBER
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2621

DATE MAILED: 11/22/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/356,940

Applicant(s)

GRAJEWSKI ET AL.

Examiner

Brian P. Werner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 33-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 33-54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 July 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. The action is responsive to the amendment received on September 23, 2002. All previous claims have been cancelled, and new 33-54 added. The previous objections and 112 rejections are withdrawn in light of applicant's cancellation of the previously pending claims.

Response to Arguments

2. Applicant's arguments with respect to claims 33-54 have been considered but are moot in view of the new ground(s) of rejection. However, it is noted that the applicant has shifted his position on the "subject matter which the applicant regards as his invention or discovery" (37 CFR § 1.75(a)). That is, it is apparent from new claims 45 and 53 that the invention has nothing to do with biometric identification, which is in contrast to the previously pending claims. The applicant is advised that any further shifts may result in an election by original presentation.

Claim Objections

3. The following quotations of 37 CFR § 1.75(a) and (d)(1) are the basis of objection:

(a) The specification must conclude with a claim particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention or discovery.

(d)(1) The claim or claims must conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description. (See § 1.58(a)).

4. Claims 37 and 49 are objected to under 37 CFR § 1.75 as failing to particularly point out and distinctly claim the subject matter which the applicant regards as his invention or discovery. The claim lacks an antecedent basis for "said output circuitry". Correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 43, 44, 51, 52 and 53 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In claim 51, the newly added limitation "requiring said individual to reply in order to continue using said device" is not supported by the original disclosure. While the

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concept of a time expiration for a password is disclosed at specification page 9, lines 5-18, the claimed limitation of requiring a replay "in order to continue using said device" is not disclosed. Where in the specification does it state that the portable device cannot be used when the user does not reply to a password change request? A written description of this aspect of the claimed invention is lacking, and this is considered to be new matter. Claim 52 is rejected as depending from claim 51. Claims 43 and 44 are equivalent to claims 51 and 52 and are rejected for the same reasons.

Regarding claim 53, step d recites the repetition of entering and associating passwords with indicia "as many times as desired". However, as disclosed, the device has a limit as to how many numbers can be entered. That is, the device does not, and cannot have an unlimited memory. What if the user desires to enter one billion indicia and associated passwords? Can this be done, as disclosed? This limitation lacks a written description, and lacks enablement as well because there has yet to be invented an unlimited memory module.

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Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 45 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over the examiner's own experience, in view of *In re Venner* (262 F.2d 91, 95, 120 USPQ 193, 194 (CCPA 1958)).

Claims 45 and 53 (as well as other claims; the examiner is using 45 and 53 to exemplify the point) simply defines an automated version of what people in general, and the examiner specifically, have been doing for many, many years. That is, for many years, the examiner as maintained a paper list of secure site user identifications together with associated pin numbers or passwords due to the overwhelming number that the examiner has to remember (and due to the infrequent use of some of them). The paper list is portable, and it is a storage means. As a fictitious example, the examiner's list might read:

	User ID	Password
Internet:	G398721	M8u40er4
Computer:	Bwerner	8u8iokhy6
Bank:	0125468	bnbnmvjj

The passwords or pin numbers are often randomly generated by the examiner himself. Thus, this process is essentially that which is claimed, with the exception that the claim is an automated version of this.

In light of *In re Venner*, where the court held that broadly providing an automatic or mechanical means to replace a manual activity which accomplished the same result is not sufficient to distinguish over the prior art, the claimed automated system for performing the same tasks that the examiner (and others) have been doing for years is not patentable per se.

9. Claims 45-48 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of McIntosh (GB 2,274,184 A) and He (US 5,944,824 A).

Regarding claims 45 and equivalent claim 53, McIntosh discloses:

a portable body (figure 1, numeral 5);

data storage in the body (figure 2, numeral 40);

user interface and communication components (figure 1, numerals 10, 15, 20 and 25) permitting an individual to store plural indicia representative of a secure site in the storage ("letters" at page 2, line 44; e.g., "BC" at page 3, line 39); and

password circuitry comprising random number generator ("random sequence" at page 3, line 14), the circuitry allowing for the unique association of a password with a respective one of the indicia ("sequence of numbers" at page 2, line 45; e.g., "1234" at page 3, line 42).

Regarding claim 46, indicia selection circuitry is disclosed (figure 4, "punch in account designation").

Regarding claim 47, recall circuitry is disclosed (figure 4, "pin number").

Regarding claim 48, a display is disclosed (figure 1, numeral 15).

McIntosh does not disclose the random number generator as randomly generating the passwords that are each uniquely associated with a respective one of the indicia. Stated another way, McIntosh does not disclose an option for the user to have his passwords randomly generated by the device. Instead, as described on page 3, the operator determines the passwords that are uniquely associated with the indicia, and the random number generator is only used in the event that an incorrect password is entered as described at page 4.

He discloses a password protected secure system, where a user identifier is associated with a password ("user identifier and a password" at column 5, line 8), comprising a random number generator (figure 7, numeral 148) for randomly generating a password for a use to gain access to the system ("the selection of a password may be randomly determined" at column 7, line 58; "random selection of the password" at column 7, line 67).

It would have been obvious at the time the invention was made to one of ordinary skill in the art to modify the system of McIntosh in such a manner as to allow the random number generator to generate random passwords/PINs for the user for purposes of gaining access to his/her secure accounts, as taught by He as described immediately above. The above combination would serve to "increase the security level

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due to the unpredictability of the password" (He, column 8, line 1) and "for convenience and for uniqueness" (He, column 13, line 6), thus ensuring a completely random password not influenced by the knowledge of the user and thus making it more difficult for a hacker to predict or figure out the user's password, and for convenience.

10. Claim 49 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of McIntosh (GB 2,274,184 A) and He (US 5,944,824 A) as applied to claim 47 above, and further in view of Bang (US 6,088,143 A).

The McIntosh and He combination does not teach a communication port on the portable device for directly transmitting the password(s) to the secure site(s).

Bang teaches a remote password key system ("infrared password key system" at column 1, line 19) comprising a communication port ("infrared transmitter" at column 3, line 29) for directly transmitting a password ("the password signal directed for direct transmittal" at column 3, line 31) to a secure site ("transmitting ... to the computer" at column 3, line 33).

It would have been obvious at the time the invention was made to one of ordinary skill in the art to provide the portable device of the McIntosh and He combination, with a direct password transmission port as taught by Bang, in order to "simplify the computer password input procedure and to reduce the possibility of unintentional password disclosure to a third party when entering a password" (Bang, column 1, line 20).

11. Claims 50-52 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of McIntosh (GB 2,274,184 A) and He (US 5,944,824 A) as applied to claim 45 above, and further in view of Guthrie et al. (US 6,161,185 A).

Regarding claim 50, the McIntosh and He combination does not teach prompting the user to change a password after expiration of a predetermined period of time.

Regarding claim 51, the combination does not teach clock circuitry and circuitry to display a message requiring the individual to reply to continue using the device.

Regarding claim 50, Guthrie discloses a personal authentication system comprising prompting the user to change a password ("requiring users to change their passwords" and "sufficient notice" at column 2, lines 35 and 36) after expiration of a predetermined period of time ("expire after a predetermined period of time" at column 2, line 34).

Regarding claim 51, Guthrie teaches clock circuitry (i.e., the circuitry that keeps track of the time period as described above) and circuitry to display a message requiring the individual to reply (i.e., the aforementioned circuitry that provides "sufficient notice") to continue using the device ("locked out" at column 2, line 39).

It would have been obvious at the time the invention was made to one of ordinary skill in the art to modify the McIntosh and He combination, to notify and require the user to change passwords associated with the indicia after predetermined periods of time, in order to "foil a malicious user's attempt at 'hammering' the authentication system with responses attempting to stumble upon a correct password to gain access" (Guthrie, column 2, line 53).

Regarding claim 51, the combination does not teach generating a new password when the prompt is actuated. However, in the above McIntosh, He and Guthrie combination, it would have been obvious to allow the user to change his password in response to the prompt taught by Guthrie, by randomly generating another password in accordance with the McIntosh and He combination, so as to ensure that the user is not locked out.

Regarding claim 54, the limitations therein are met by the McIntosh, He and Guthrie combination as described above.

12. Claims 33-36, 38, 39, 40 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of McIntosh (GB 2,274,184 A) and He (US 5,944,824 A) as applied to claim 45-48 and 53 above, and further in view of Ramachandran (US 6,315,195 B1).

The elements of claims 33-36, 38 and 39 (other than the differences discussed below) are met by the McIntosh and He combination as described in the rejections above. Regarding claim 40 specifically, McIntosh teaches that a preselected string of predetermined length is stored ("first four letters" and "remaining two letters" at page 3, line 30).

The McIntosh and He combination requires an initial password be entered for a user to gain access to the accounts and associated passwords stored therein (e.g., "the password" and "FLAG" at page 3, lines 32 and 33). The McIntosh and He combination does not teach using biometrics for this same purpose. Specifically, the combination

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does not teach a biometric interface engaged with the body, a non-volatile memory, generating and storing an initialized biometric template and comparing with a second generated biometric template upon subsequent presentation for enabling the device.

Ramachandran discloses a portable device (e.g., figures 1 and 2) for storing pin numbers (e.g., figures 82+) as described fully in the previous Office Action, comprising biometric interface engaged with the body (figure 4, numeral 47), a non-volatile memory (figure 4, numeral 38), generating and storing an initialized biometric template ("data representative of the identifying biometric features" at column 8, line 59) and comparing with a second generated biometric template upon subsequent presentation ("compare" at column 12, line 24) for enabling the device ("enable authorized users of the card" at column 8, line 61). Regarding claim 39 specifically, a fingerprint reader is disclosed ("fingerprint" at column 8, line 53).

It would have been obvious at the time the invention was made to one of ordinary skill in the art to replace the initial password circuitry of the McIntosh and He combination, with biometrics comparison circuitry as taught by Ramachandran as described above, in order to "increase the security level" (Ramachandran, column 11, line 8) thus providing increased protection from an unauthorized user from gaining access to the legitimate user's passwords.

Regarding claim 41, while the McIntosh and He combination teaches a plurality of function keys on the portable device (i.e., McIntosh, figure 1, numeral 10), arrow keys are not disclosed. However, McIntosh states that "a more complex version of the device 5 might well be produced incorporating ... more function keys" at page 4, line 33.

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Ramachandran discloses arrow keys (figure 1, numerals 4 and 26) for purposes of scrolling up and down through a data list. It would have been obvious at the time the invention was made to one of ordinary skill in the art to provide the arrow keys of Ramachandran, on the device of the McIntosh and He combination, to increase functionality as suggested by McIntosh, and to allow a user to scroll through a list of data without having to re-enter the initial password each time.

13. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of McIntosh (GB 2,274,184 A), He (US 5,944,824 A) and Ramachandran (US 6,315,195 B1) as applied to claim 35 above, and further in view of Bang (US 6,088,143 A).

The McIntosh, He and Ramachandran combination does not teach a communication port on the portable device for directly transmitting the password(s) to the secure site(s).

Bang teaches a remote password key system ("infrared password key system" at column 1, line 19) comprising a communication port ("infrared transmitter" at column 3, line 29) for directly transmitting a password ("the password signal directed for direct transmittal" at column 3, line 31) to a secure site ("transmitting ... to the computer" at column 3, line 33).

It would have been obvious at the time the invention was made to one of ordinary skill in the art to provide the portable device of the McIntosh, He and Ramachandran combination, with a direct password transmission port as taught by Bang, in order to

“simplify the computer password input procedure and to reduce the possibility of unintentional password disclosure to a third party when entering a password” (Bang, column 1, line 20).

14. Claims 42-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of McIntosh (GB 2,274,184 A), He (US 5,944,824 A) and Ramachandran (US 6,315,195 B1) as applied to claim 33 above, and further in view of Guthrie et al. (US 6,161,185 A).

Regarding claim 42, the McIntosh, He and Ramachandran combination does not teach prompting the user to change a password after expiration of a predetermined period of time.

Regarding claim 43, the combination does not teach clock circuitry and circuitry to display a message requiring the individual to reply to continue using the device.

Regarding claim 42, Guthrie discloses a personal authentication system comprising prompting the user to change a password (“requiring users to change their passwords” and “sufficient notice” at column 2, lines 35 and 36) after expiration of a predetermined period of time (“expire after a predetermined period of time” at column 2, line 34).

Regarding claim 43, Guthrie teaches clock circuitry (i.e., the circuitry that keeps track of the time period as described above) and circuitry to display a message requiring the individual to reply (i.e., the aforementioned circuitry that provides “sufficient notice”) to continue using the device (“locked out” at column 2, line 39).

It would have been obvious at the time the invention was made to one of ordinary skill in the art to modify the McIntosh, He and Ramachandran combination, to notify and require the user to change passwords associated with the indicia after predetermined periods of time, in order to "foil a malicious user's attempt at 'hammering' the authentication system with responses attempting to stumble upon a correct password to gain access" (Guthrie, column 2, line 53).

Regarding claim 44, the combination does not teach generating a new password when the prompt is actuated. However, in the above McIntosh, He, Ramachandran and Guthrie combination, it would have been obvious to allow the user to change his password in response to the prompt taught by Guthrie, by randomly generating another password in accordance with the McIntosh and He combination, so as to ensure that the user is not locked out.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The examiner uncovered many references that store indicia associated with passwords; this is not a novel concept. Two examples of many are DE 29808147 U1 (the abstract and figure are provided herewith) and DE19938001 A1. These references may be applied by the examiner in future actions.

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16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian P. Werner whose telephone number is 703-306-3037. The examiner can normally be reached on M-F, 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo H. Boudreau can be reached on 703-305-4706. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4750.

Brian Werner
Patent Examiner
November 20, 2002



**BRIAN WERNER
PATENT EXAMINER
ART UNIT 2621**